

U.S. Influenza Surveillance 2004 - 2005

Keiji Fukuda

Influenza Branch

National Center for Infectious Diseases

Centers for Disease Control and Prevention

Evolving U.S. Influenza Surveillance

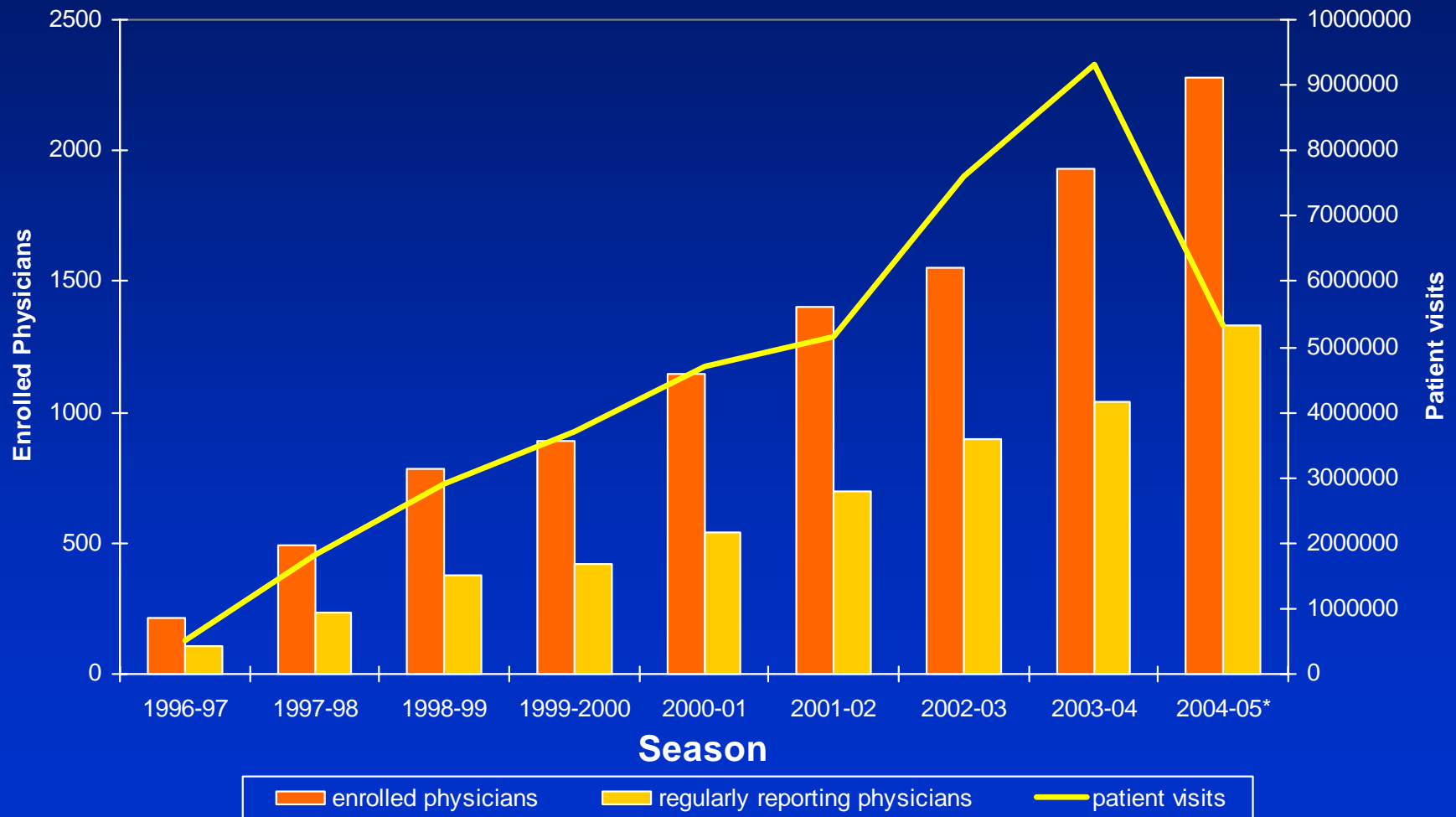
Core

- Viruses
 - WHO / NRVES Laboratory System
- Influenza-like illness
 - Sentinel Provider (SP) System
- Mortality
 - 122 cities
 - NCHS
- State activity assessment
 - State & Territorial Epidemiologists Report

Changes Underway

- Current systems
 - Enhancements to SP system
- New Systems Added
 - Pediatric influenza hospitalizations
 - New Vaccine Surveillance Network
 - Emerging Infections Program
 - Pediatric influenza deaths
 - H5N1 detection in ill travelers
- Under evaluation
 - Biosense
 - Notifiable diseases, etc.

Growth of the Influenza Sentinel Physician Surveillance System



* Data as of 1/27/2005

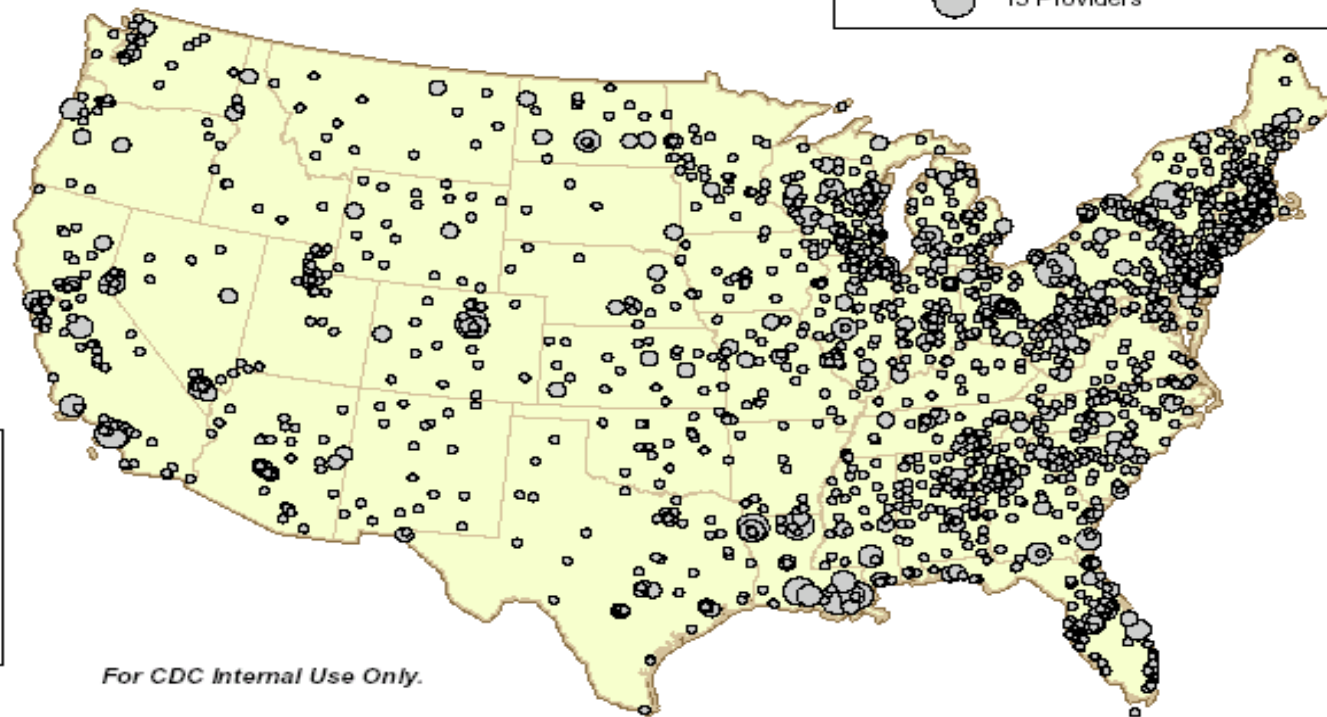
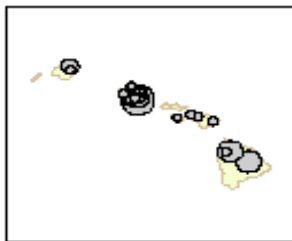
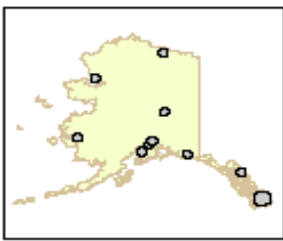
Sentinel Provider System Coverage Map

Influenza Sentinel Provider Network All Providers By Zip Code

Dot size varies with the number
of providers per zip code.

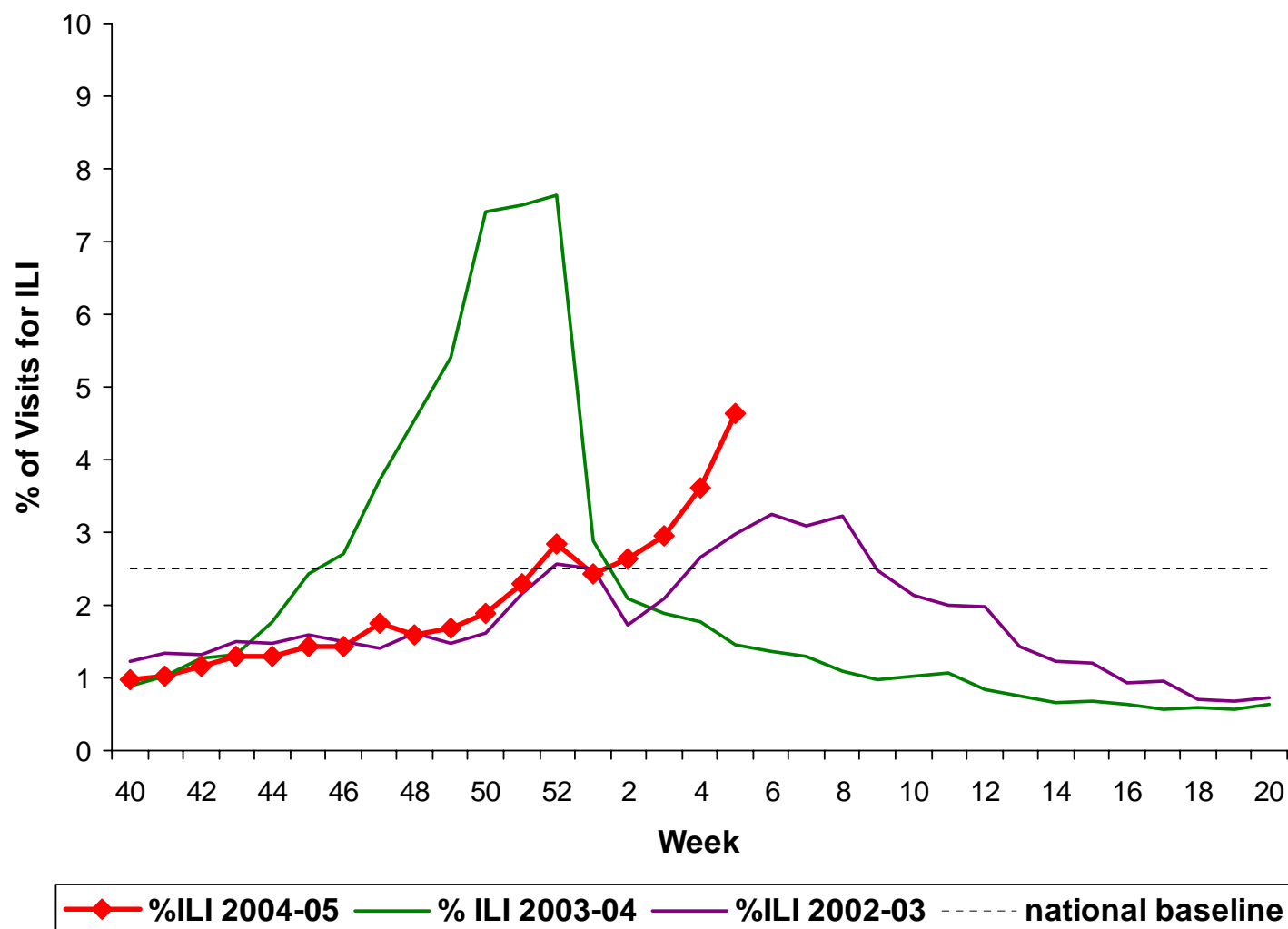
n = 2127

- 1 Provider
- 2 Providers
- 3 - 4 Providers
- 5 - 8 Providers
- 15 Providers

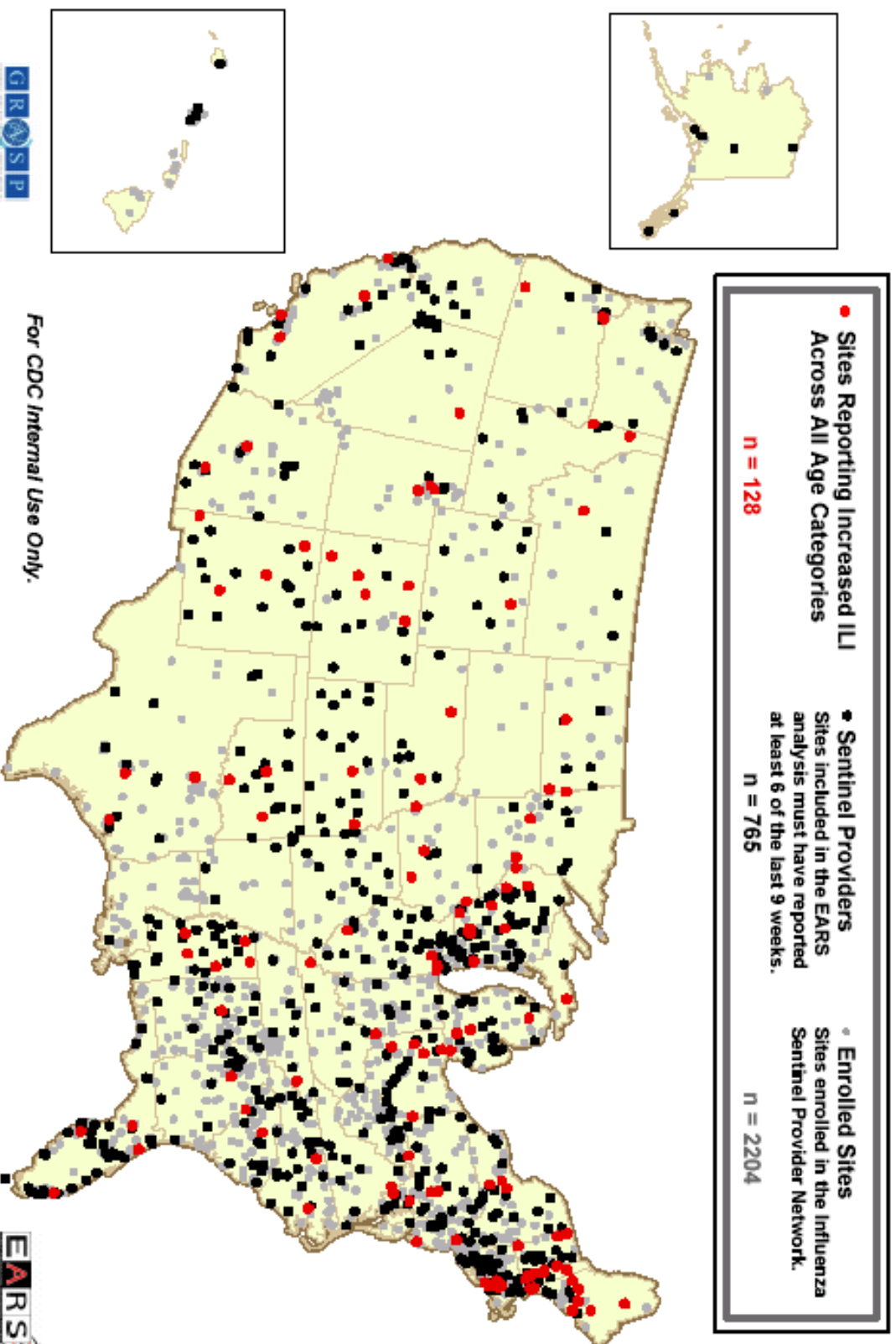


For CDC Internal Use Only.

Visits for Influenza-like Illness to U.S. Sentinel Providers, 2002 - 2005



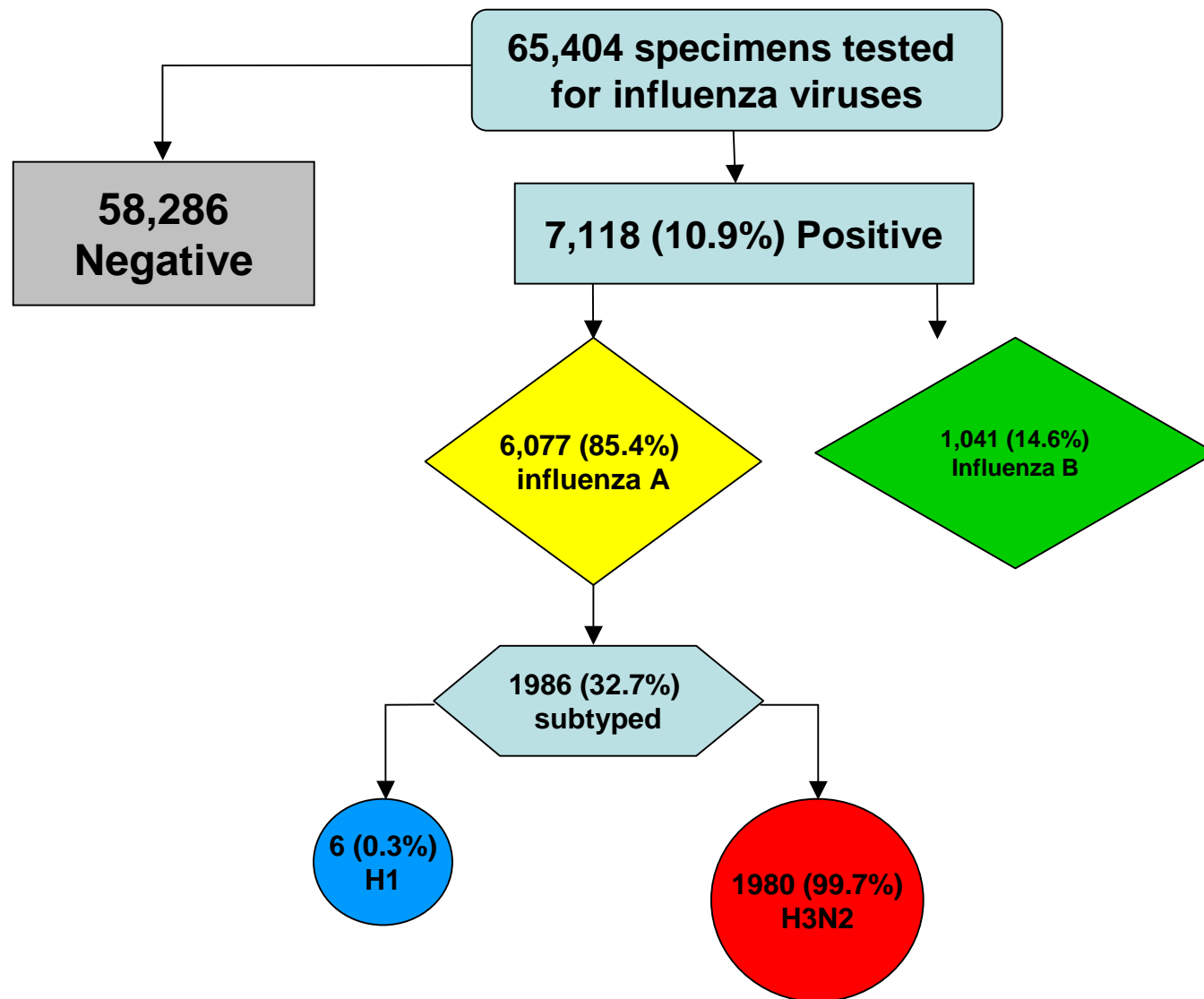
Influenza-like illness (ILI) Reported by the Influenza Sentinel Provider Network and Analyzed by the Early Aberration Reporting System (EARS) Week ending January 15, 2005 - Week 2



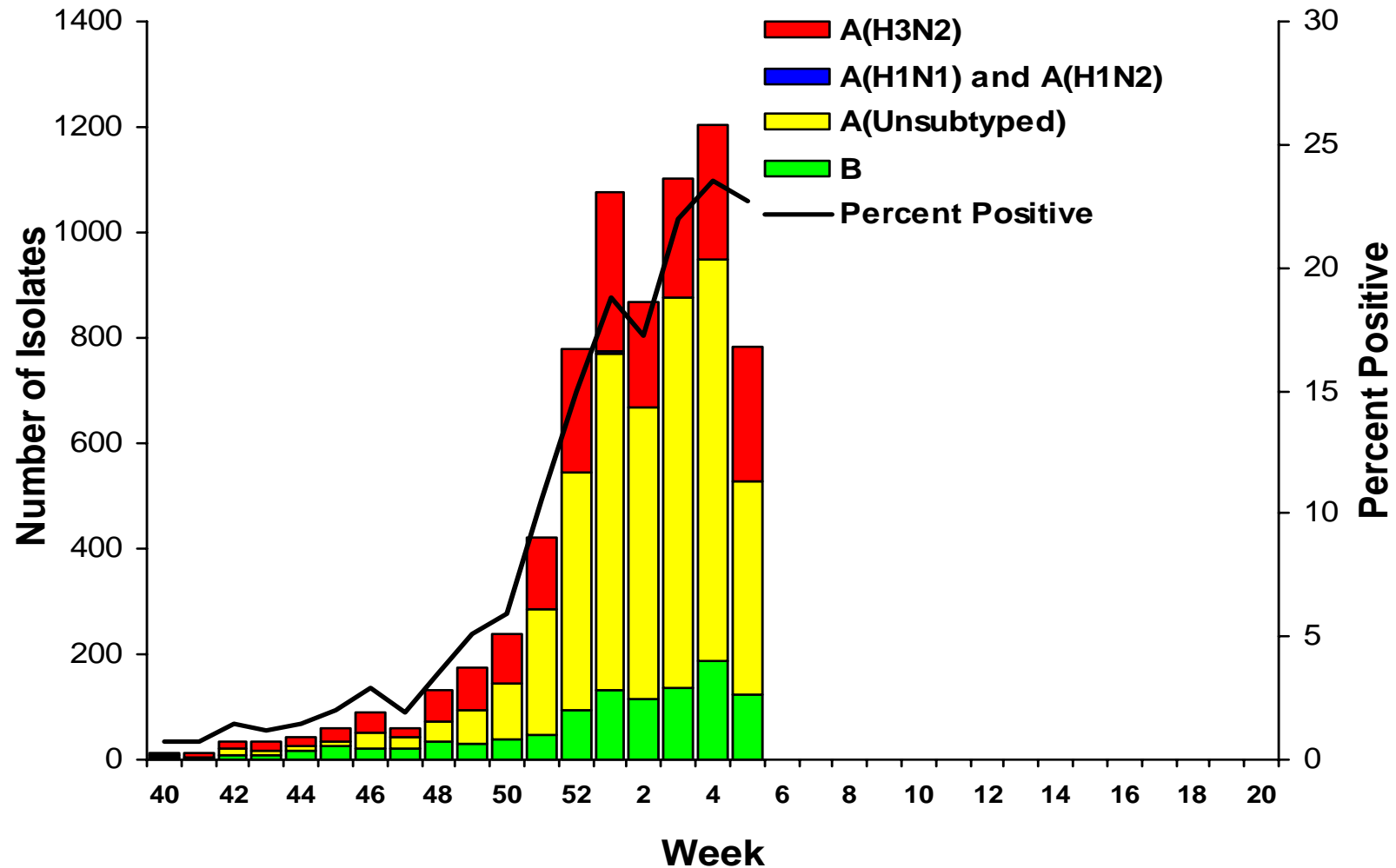
2004 – 2005 U.S. Season

Influenza Virus Detections, 2004-05

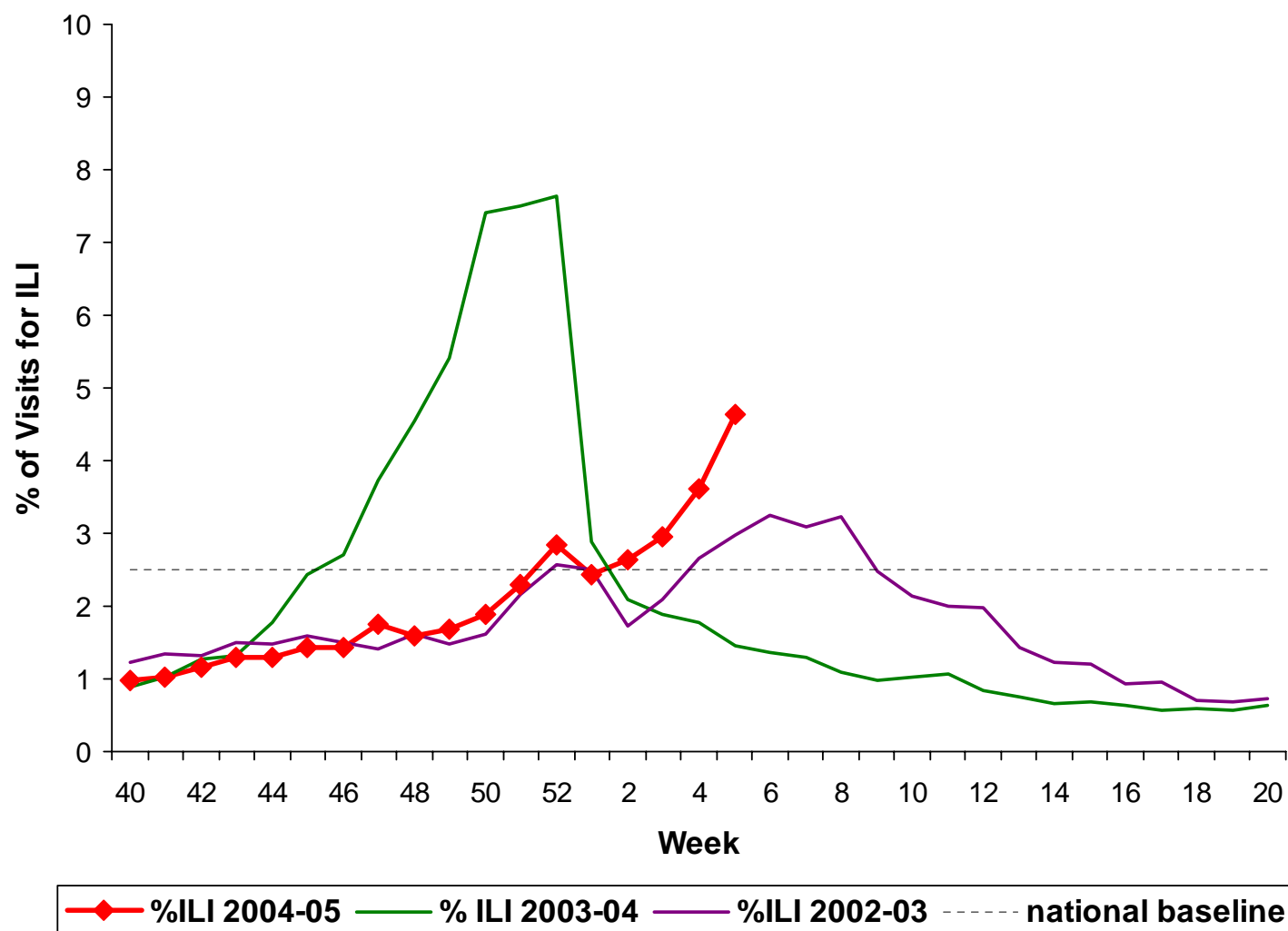
U.S. WHO/NREVSS Collaborating Laboratories



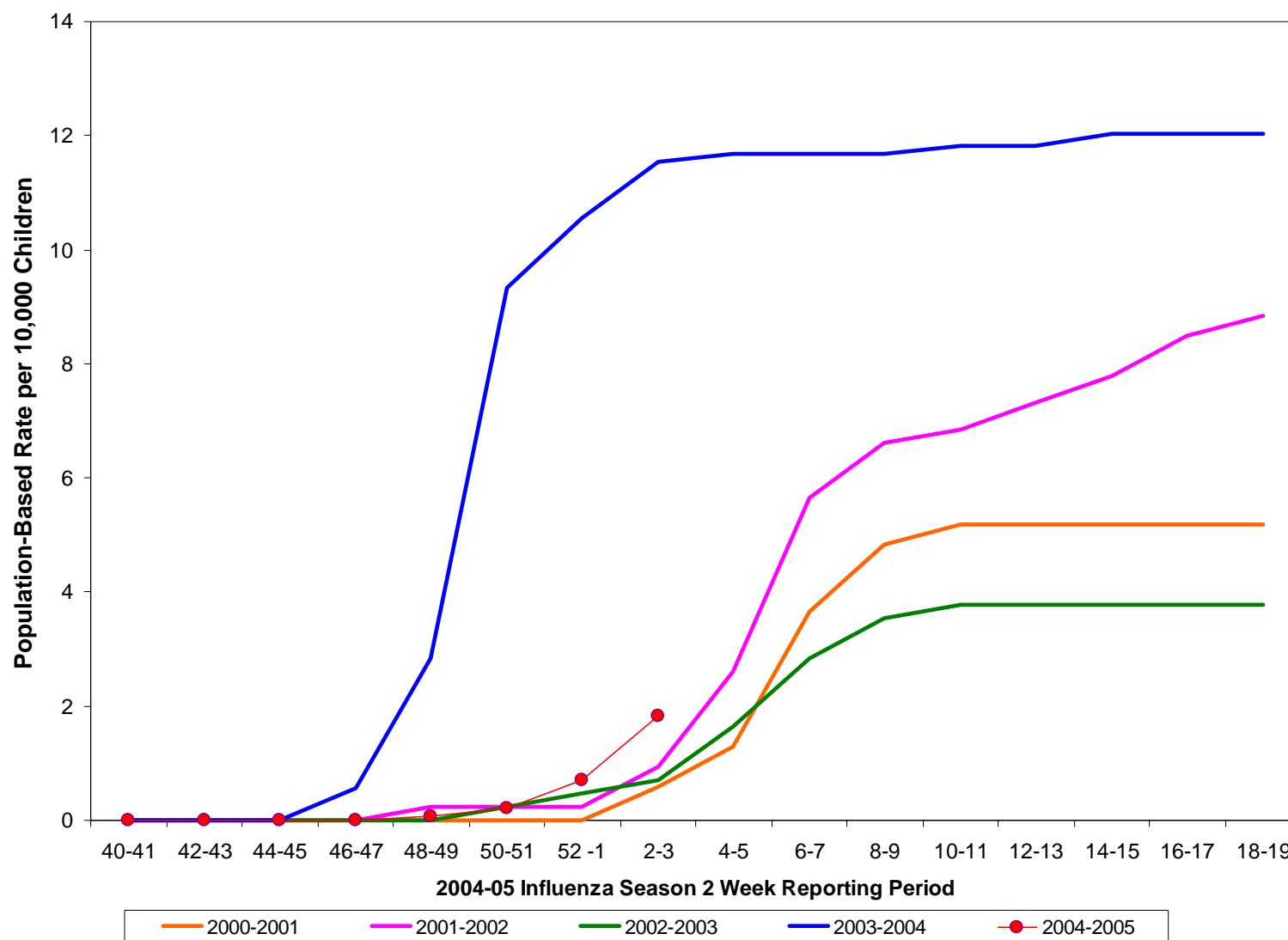
U.S. WHO/NREVSS Collaborating Laboratories Summary, 2004-05



Visits for Influenza-like Illness to U.S. Sentinel Providers, 2002 - 2005

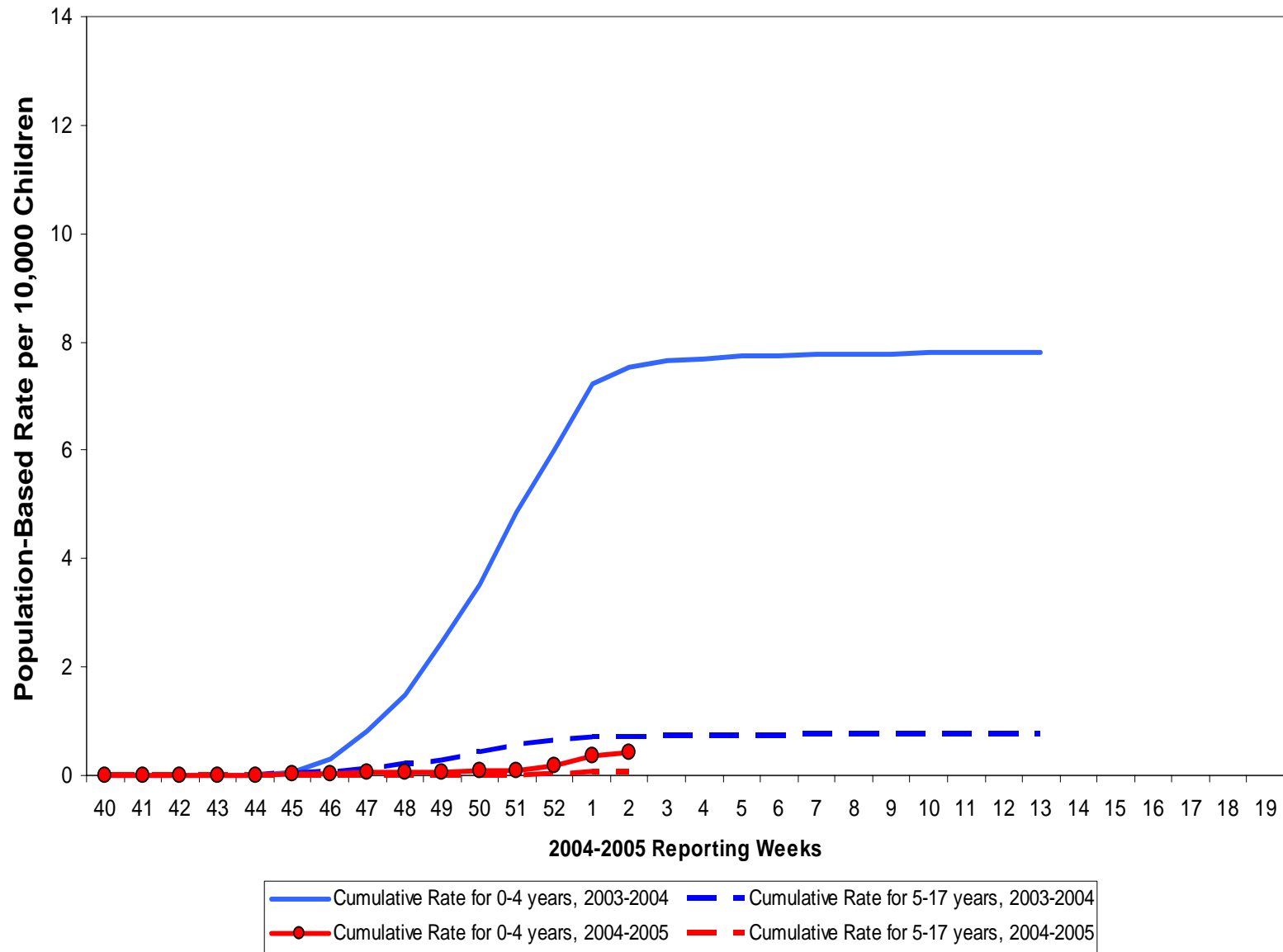


NVSN Influenza (Lab Confirmed) Hospitalization Rates Children 0 - 4 Years, 2000 - 2005



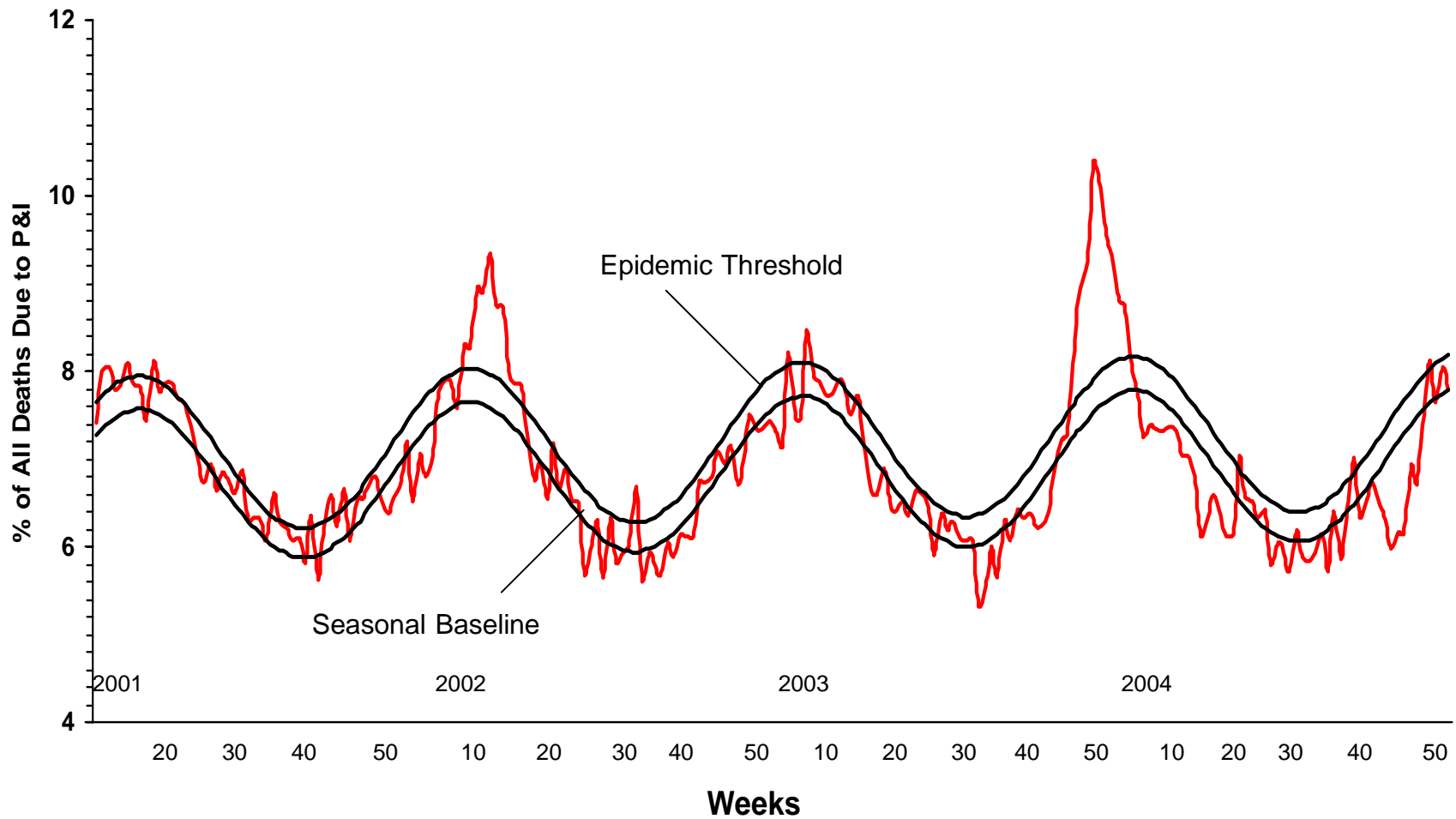
This graph has been updated from the January 21, 2004 report due to laboratory confirmation of an additional influenza hospitalization between December 26, 2004 and January 8, 2005.

EIP Influenza (Lab Confirmed) Hospitalization Rates Children 0-4 years & 5-17 years, 2003 - 2005



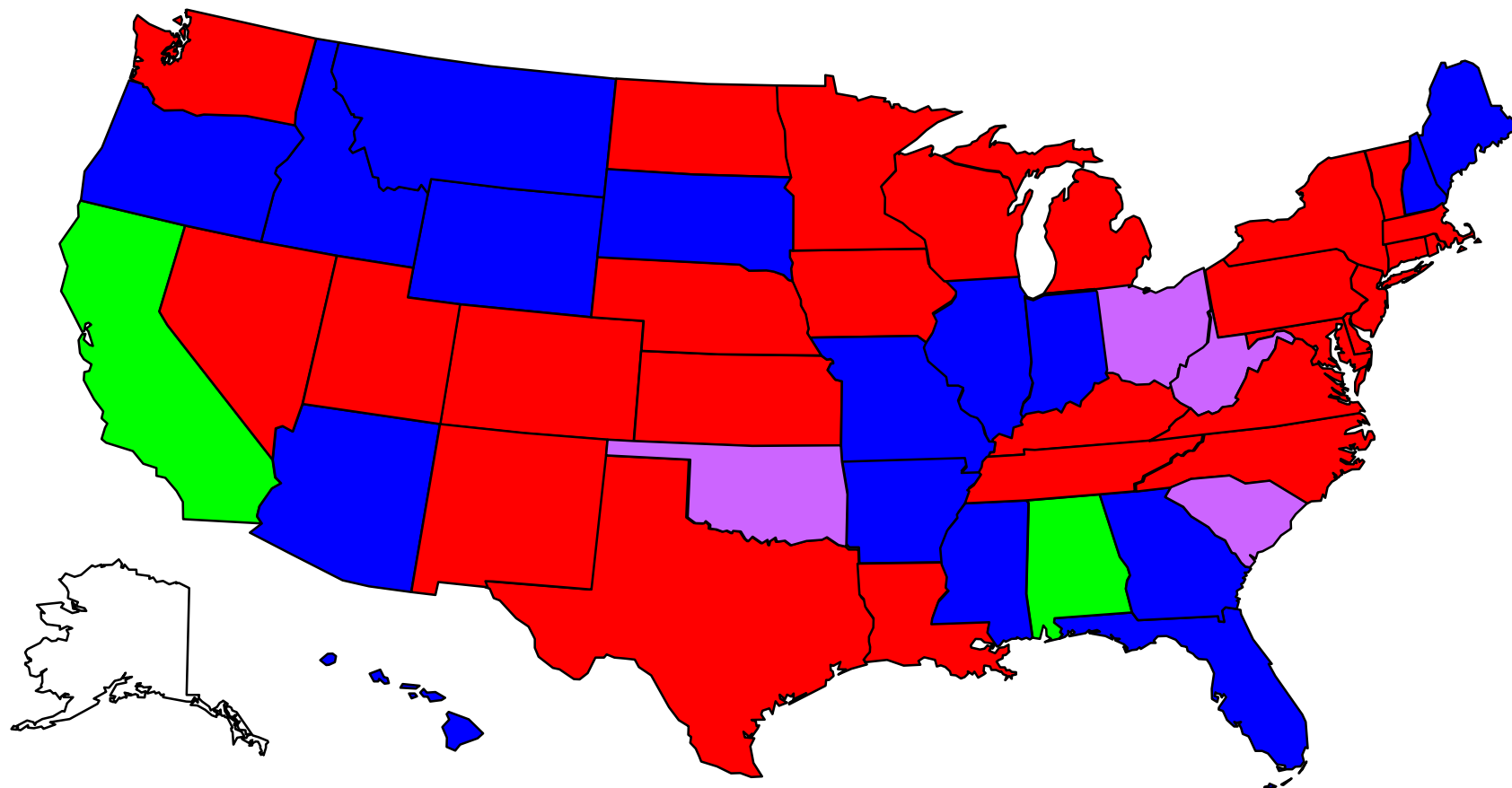
Pneumonia and Influenza Mortality for 122 U.S. Cities

Week Ending 2/05/2005



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists

Week ending February 05, 2005 - Week 5



No Report



No Activity



Sporadic



Local Activity



Regional



Widespread



Conclusion

- Moderate impact compared with 2003
- Dominated by A (H3N2) viruses
- 6 reported pediatric deaths
- Ongoing activity